Permit Compliance Schedules and Water Quality Standards Variances

Module 5

NPDES Permit Writers' Specialty Workshop:
Addressing Nutrient Pollution in NPDES Permits

Addressing Nutrient Pollution Through NPDES Permits

Module 2	Technology-based Effluent Limitations (TBELs)
Module 3	Water Quality -based Effluent Limitations (WQBELs)
Module 4	Final Effluent Limitations, Monitoring, and Reporting
Module 5	Permit Compliance Schedules and WQS Variances
Module 6	Watershed-based Permitting and WQ Trading

Permit Compliance Schedules—
CWA section 301(b)(1)(C) and 40 CFR 122.47, 131.15

A **permit compliance schedule**…

- is an option for flexibility that may be implemented directly through the permitting process
- provides time to meet final effluent limitations and requires an enforceable sequence of actions or operations leading to compliance
- generally would be included in the special conditions of the permit

Permit Compliance Schedules

- Technology-based limitations
  - generally not allowed for TBELs based on CWA standards because CWA compliance deadlines have passed for existing sources
- Water quality-based limitations
  - StarKist decision (1990)
  - Compliance schedule memorandum (2007) (further clarifies requirements at 40 CFR 122.47)
  - WQS Regulatory Revisions at 40 CFR 131.15 (2015)

Compliance Schedule Considerations

- Star-Kist Decision (April 16, 1990)
  - require immediate compliance with effluent limitations based on WQS adopted on or before July 1, 1977
  - may allow compliance schedules for limitations based on WQS adopted or modified after July 1, 1977, only if the state has clearly indicated in its WQS or implementing regulations that it intends to allow compliance schedules

- WQS Regulatory Revisions—40 CFR 131.15 (80 Fed. Reg. 51020, August 21, 2015)
  - requires authorizing provisions in order to allow compliance schedules
  - authorizing provisions must be reviewed and approved by EPA under CWA section 303(c)

Compliance Schedule Considerations

EPA Compliance Schedule Memorandum (May 10, 2007)

- demonstrate that the permittee cannot immediately comply with new limit
- justify and document "appropriateness"
- evaluate and justify "as soon as possible"
- include enforceable sequence of events leading to compliance (interim milestones as needed)
- include enforceable "final" effluent limitation and date for achievement
- not appropriate for schedule solely to provide time to develop TMDL or conduct Use Attainability Analysis

Example—Long Term Compliance Schedule: Cahaba River, Alabama

- Cahaba River TMDL for total phosphorus (TP)
- TP reductions from point sources will be achieved through a phased approach
- Compliance schedule over a 15-year period with interim TP milestones—schedule for each facility driven by "as soon as possible" evaluation
- Permittees submit semi-annual progress reports

	Phase I	Phase II	Phase III
Major WWTPs	0.40 mg/l	0.20 mg/l	0.043 mg/l
Minor WWTPs	2.00 mg/l	0.50 mg/l	0.300 mg/l
Margaret WWTP	1.00 mg/l	0.25 mg/l	0.150 mg/l

Water Quality Standards Variances—CWA section 101(a), 303(c)(2); 40 CFR 131.14

A **water quality standards variance**...

- is a time-limited designated use and criterion for a specific pollutant(s) or water quality parameter(s)
- is a change to WQS that must be reviewed and approved by EPA
- generally is discharger-specific (single or multiple dischargers), but may be applied to a water body or waterbody segment
- may not be adopted if designated use and criterion can be achieved by implementing required TBELs

Legal Basis for WQS Variances

- Revisions to the WQS regulation in 2015 added 40 CFR 131.14, which authorizes states to use WQS variances and establishes certain requirements

- A state policy or authorizing provision is not federally required in order to use WQS variances

– BUT –

- If a state chooses to adopt a WQS variance policy or authorizing provision, it must be reviewed and approved by EPA

When might a WQS variance be appropriate?

A water quality standards variance might be an appropriate tool when:

- the designated use is not attainable now, but the state believes it can be in the future
- the feasibility of attaining the designated use is uncertain, but the state doesn't want to "give up"
- the designated use is not attainable, but progress can be made while the state determines what is attainable

General Requirements

- A variance
  - applies only to the discharger(s), pollutant(s) or parameter(s), water body or waterbody segment(s), and time period specified
  - reflects the *highest attainable condition* during the specified time period
  - does not lower currently attained water quality
  - applies only to NPDES permits and CWA section 401 certifications
  - is a water quality standard that must be reviewed and approved by EPA
- TBELs and all other water quality standards apply

Using a Multiple Discharger WQS Variance

- Meet the same requirements in 40 CFR 131.14 as single dischargers
- Account for as much individual permittee information as possible
  - should apply only to permittees experiencing the same issues
  - group permittees on basis of similar characteristics or technical and economic conditions
- A subsequent variance must again evaluate the justification and the permittees that will be covered under it

Highest Attainable Condition—40 CFR 131.14(b)(1)(ii)

For discharger-specific variances:

- Highest attainable interim criterion or
- Interim effluent condition that reflects the greatest pollutant reduction achievable or
- *If no additional feasible pollutant control technology can be identified*:
  - interim criterion or interim effluent condition reflecting the greatest pollutant reduction achievable with technologies installed at time of variance adoption as well as adoption and implementation of a pollutant minimization program

Highest Attainable Condition—40 CFR 131.14(b)(1)(ii)

For variances applicable to a water body or waterbody segment:

- Highest attainable interim use and interim criterion or
- *If no additional feasible pollutant control technology can be identified*:
  - interim use and interim criterion reflecting the greatest pollutant reduction achievable with technologies installed at time of variance adoption as well as adoption and implementation of a pollutant minimization program

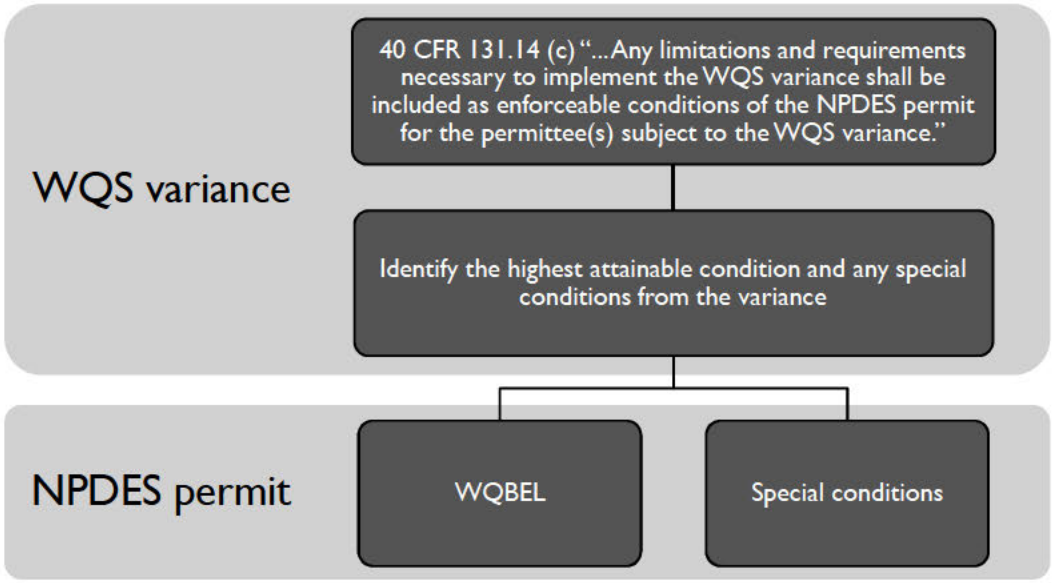
Supporting Documentation Submitted to EPA

- Demonstration of the need for a variance
- Term of the variance is only as long as necessary to achieve highest attainable condition
- In addition, a variance applied to water body or waterbody segment must identify cost effective and reasonable BMPs for nonpoint sources

Requirements for Variances Longer Than 5 Years

- Reevaluate at least every 5 years with opportunity for public input
- Submit reevaluation results to EPA within 30 days
- Adopt a provision stating that if the reevaluation identifies an any more stringent highest attainable condition, it becomes the applicable highest attainable condition
- Adopt a provision stating that the variance is no longer the applicable standard if a reevaluation is not conducted on schedule or submitted to EPA within 30 days

Implementing WQS Variances in NPDES Permits



NPDES Permit Compliance Schedules and WQS Variances are Different

Permit Compliance Schedules	WQS Variances
The permit requires compliance with final WQBELs (based on WQS) "as soon as possible"	The WQS is temporarily modified and WQBELs are adjusted to make incremental progress toward attaining the standard
Actions and time needed to comply with the WQBEL are known	Actions and time needed to comply with the original WQBEL are uncertain
A condition of the permit	A change to WQS

Using a NPDES Permit Compliance Schedule with a WQS Variance

- Highest attainable condition of the WQS variance
  - highest attainable by the end of the variance term
  - applicable throughout the variance term
- A permitting authority could grant a compliance schedule to meet the WQBEL that derives from the highest attainable condition of the WQS variance

NPDES Compliance Schedules and WQS Variances—Example

- Underlying WQS require **WQBEL = 0.1 mg/L**
- Current facility performance = 1.0 mg/L
- Adopted and approved **WQS variance with 15 year term**
- **Highest attainable condition** (interim criterion) results in **WQBEL = 0.3 mg/L**
- Facility needs 10 years to implement changes to comply with WQBEL = 0.3 mg/L
- Permit includes a **10 year compliance schedule** with an **initial interim limit of 1.0 mg/L** and an enforceable sequence of events leading to compliance with **WQBEL = 0.3 mg/L**

Documentation

Document in the fact sheet or statement of basis:

- appropriate statutory or regulatory citations for compliance schedules
- explanation of how any compliance schedule provisions are consistent with regulations, including demonstration that permittee cannot immediately comply and evaluation of "appropriateness" and "as soon as possible"
- alternate criteria used to calculate WQBELs under a water quality standards variance
- any special conditions required by the WQS variance

Questions?

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